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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/314,629	05/19/1999	MAKOTO KAYASHIMA	501.37212X00	5470

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EXAMINER
PARTON, KEVIN S

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/314,629	KAYASHIMA ET AL.
	Examiner	Art Unit
	Kevin Parton	2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-17_ is/are pending in the application.

    4a) Of the above claim(s) _9_ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-8 and 10-17_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Specification

1.   Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2.   The abstract of the disclosure is objected to because:

     a.   It exceeds the maximum allowed number of words.

     b.   The phrase "A network system includes" is unnecessary.

Correction is required. See MPEP § 608.01(b).

Response to Arguments

3.   Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection. The examiner acknowledges that the Matchefts et al. reference is invalid and the new grounds of rejection can be found below.

4.   Applicant argues "The remaining references...rejection of claims 1-9" (page 9, paragraph 2). This argument is not persuasive in light of the use of Sidey in the new grounds of rejection.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 5, 6, 10, 11, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidey in view of Hansen.

7. Regarding claim 1, Sidey teach a network management system comprising a plurality of network devices (column 3, line 67 – column 4, line 2) operating in a coordinated manner and a management server (figure 1, reference number 102) managing the plurality of network devices, the management server comprising:

   a. Means for confirming consistency of the setup information set up in the plurality of network devices (column 9, lines 34-38). Note that in the reference, the configuration information for both hardware and software of network nodes is collected and compared to the nominal setup in a database. If there is a discrepancy, action will be taken, if not, the device is noted as consistent.

Although the system disclosed by Sidey shows substantial features of the claimed invention, it fails to disclose:

   a. Means for generating a plurality of pieces of setup information to be used for the plurality of network devices on which settings are to be made, the plurality of pieces of setup information being generated to maintain consistency.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sidey, as evidenced by Hansen.

In an analogous art, Hansen discloses a configuration management system for remote monitoring and configuration of network elements with a management server comprising:

    a. Means for generating a plurality of pieces of setup information to be used for the plurality of network devices on which settings are to be made, the plurality of pieces of setup information being generated to maintain consistency (column 5, lines 23-27). Note that in the reference, configuration information is generated in order to maintain consistency of network device configuration.

Given the teaching of Hansen, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sidey by employing the generation of setup information for network elements. The system of Sidey receives and compares current configuration information to ensure system consistency. It is a logical extension of this to then generate configuration information for the client and re-configure it. This benefits the system by relieving the need for additional work by a system administrator and decreases possible down time.

8.   Regarding claim 2, Sidey and Hansen teach all the limitations as applied to claim 1. Sidey further teaches means wherein the management server further comprises:

    a. Means for retrieving meta-level setup information from each of said plurality of pieces of setup information (column 10, lines 23-26). Note that in the reference, the "meta-information" includes the computer name and previous information entered into the database about the network element.

    b. Means for retrieving interrelated setup information set up in said plurality of network devices (column 9, lines 20-26). Note that the server communicates with the network elements to obtain configuration or setup information.

9.   Regarding claim 5, Sidey and Hansen teach all the limitations as applied to claim 1. Sidey further teach means wherein:

      a. The network device is a server (column 4, lines 9-15). Note that in the reference, any type of network element could be included; the clients can be servers to another system.

Although the system disclosed by Sidey and Hansen (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose including setup information that includes an access privilege of the server.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sidey and Hansen.

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sidey and Hansen by employing the inclusion of access policy for a managed server. Servers are just another network element to be managed, and security is probably the most important aspect of server management. This would be a natural addition of setup information that would be a necessity for all servers to be confirmed for consistency and automatically configured.

10.   Regarding claim 6, Sidey and Hansen teach all the limitation as applied to claim 1. Sidey further teach means wherein:

      a. The network device is a computer executing a network application periodically exchanging data (column 4, lines 12-15). Note that in the reference, one of the specifically mentioned network elements is a router. Routers are network elements that exchange data.

    b. Wherein each of the plurality of pieces of setup information includes setup information related to the network application (column 9, lines 20-40). Note that in the reference, routers are given as an example and different setup information about those elements is enumerated.

11.   Regarding claim 10, Sidey teaches a network management system having a plurality of network devices operating in a coordinated manner and a management server managing said plurality of network devices, the network management server comprising means for:

    a. Distributing a plurality of pieces of setup information to each of said network devices (column 9, lines 49-60). Note that in the reference, a number of setup parameters can be distributed to the network elements.

    b. Wherein each of said plurality of setup information is for each of said plurality of network devices operating in a coordinated manner respectively and has no inconsistencies with each other as to operating of said network devices in a coordinated manner (column 9, lines 34-38, 49-60). Note that in the reference, the setup of network elements is assessed for consistency and any discrepancies are reported or "fixed" automatically.

Although the system disclosed by Sidey shows substantial features of the claimed invention, it fails to disclose means for:

    a. Generating a plurality of pieces of setup information based on predefined meta-level information that is referred to for causing said plurality of network devices to operate in a coordinated manner.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Sidey, as evidenced by Hansen.

In an analogous art, Hansen discloses a configuration management system for remote

monitoring and configuration of network elements with a management server comprising means

for:

a.   Generating a plurality of pieces of setup information based on predefined

meta-level information that is referred to for causing said plurality of network

devices to operate in a coordinated manner (column 5, lines 23-27). Note that

in the reference, configuration information is generated in order to maintain

consistency of network device configuration.

Given the teaching of Hansen, a person having ordinary skill in the art would have

readily recognized the desirability and advantages of modifying Sidey by employing the

generation of setup information for network elements. The system of Sidey receives and

compares current configuration information to ensure system consistency. It is a logical

extension of this to then generate configuration information for the client and re-configure it.

This benefits the system by relieving the need for additional work by a system administrator and

decreases possible down time.

12.   Regarding claim 11, Sidey teaches all the limitations as applied to claim 10. He further

teaches means for:

a.   Collecting setup information for a network device of said plurality of network

devices (column 9, lines 21-26). Note that in the reference, a number of setup

parameters can be collected from the network elements.

   b. Checking said meta-level information to be checked with said predefined

      meta-level information (column 9, lines 34-38). Note that in the reference, the

      configuration information is compared to the nominal setup information for

      the device.

Although the system disclosed by Sidey shows substantial features of the claimed

invention, it fails to disclose means for:

   a. Generating meta-level information to be checked based on said collected setup

      information.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Sidey, as evidenced by Hansen.

In an analogous art, Hansen discloses a configuration management system for remote

monitoring and configuration of network elements with a management server comprising means

for:

   a. Generating meta-level information to be checked based on said collected

      setup information (column 5, lines 23-27). Note that in the reference,

      configuration information is generated in order to maintain consistency of

      network device configuration. This is the type of information that would be

      checked.

Given the teaching of Hansen, a person having ordinary skill in the art would have

readily recognized the desirability and advantages of modifying Sidey by employing the

generation of setup information for network elements. The system of Sidey receives and

compares current configuration information to ensure system consistency. It is a logical

extension of this to then generate configuration information for the client and re-configure it.

This benefits the system by relieving the need for additional work by a system administrator and

decreases possible down time.

13.   Regarding claim 14, Sidey and Hansen teach all the limitations as applied to claim 10.

Sidey further teaches means wherein:

> a.   The network device is a server (column 4, lines 9-15). Note that in the
>
>   reference, any type of network element could be included; the clients can be
>
>   servers to another system.

Although the system disclosed by Sidey and Hansen shows substantial features of the

claimed invention, it fails to disclose including setup information that includes an access

privilege of the server.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Sidey and Hansen.

A person having ordinary skill in the art would have readily recognized the desirability

and advantages of modifying Sidey and Hansen by employing the inclusion of access policy for

a managed server. Servers are just another network element to be managed, and security is

probably the most important aspect of server management. This would be a natural addition of

setup information that would be a necessity for all servers to be confirmed for consistency and

automatically configured.

14.   Regarding claim 15, Sidey and Hansen teach all the limitation as applied to claim 10.

Sidey further teach means wherein:

    a. The network device is a computer executing a network application periodically exchanging data (column 4, lines 12-15). Note that in the reference, one of the specifically mentioned network elements is a router. Routers are network elements that exchange data.

    b. Wherein each of the plurality of pieces of setup information includes setup information related to the network application (column 9, lines 20-40). Note that in the reference, routers are given as an example and different setup information about those elements is enumerated.

15.   Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidey and Hansen as applied to claims 1 and 10 respectively, and further in view of Crichton et al.

16.   Regarding claim 3, although the system disclosed by Sidey and Hansen (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein each of the plurality of pieces of setup information includes tunneling setup information.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sidey and Hansen, as evidenced by Crichton et al.

In an analogous art, Crichton et al. discloses a system for the setup of communications between machines behind disparate firewalls. The system includes each of the plurality of pieces of setup information includes tunneling setup information (column 4, lines 20-34).

Given the teaching of Crichton et al., a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sidey and Hansen by employing tunneling setup information in the standard setup information. Firewalls are a common network

element that must be setup in any configuration operation. Setting them up for tunneling allows

for greater ease of communication between machines on both sides of the firewall.

17.   Regarding claim 12, although the system disclosed by Sidey and Hansen (as applied to

claim 10) shows substantial features of the claimed invention, it fails to disclose means wherein

each of the plurality of pieces of setup information includes tunneling setup information.

    Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Sidey and Hansen, as evidenced by Crichton et al.

    In an analogous art, Crichton et al. discloses a system for the setup of communications

between machines behind disparate firewalls. The system includes each of the plurality of pieces

of setup information includes tunneling setup information (column 4, lines 20-34).

    Given the teaching of Crichton et al., a person having ordinary skill in the art would have

readily recognized the desirability and advantages of modifying Sidey and Hansen by employing

tunneling setup information in the standard setup information. Firewalls are a common network

element that must be setup in any configuration operation. Setting them up for tunneling allows

for greater ease of communication between machines on both sides of the firewall.

18.   Claims 4, 7, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sidey and Hansen as applied to claims 1, 1, 10, and 10, respectively, and further in view of Antur

et al.

19.   Regarding claim 4, although the system disclosed by Sidey and Hansen (as applied to

claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein:

        a.   The network device is a firewall

      b. Each of the plurality of pieces of setup information includes setup information related to access control for the firewall.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sidey and Hansen, as evidenced by Antur et al..

In an analogous art, Antur et al. disclose a system for configuration (setup) wherein:

      a. The network device is a firewall (figure 2; column 6, lines 50-55).

      b. Each of the plurality of pieces of setup information includes setup information related to access control for the firewall (column 6, lines 50-55).

Given the teaching of Antur et al., a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sidey and Hansen by employing the use of setup information for firewalls. Firewalls require a large amount of setup information and must be commonly administered by a small number of personnel.

20.   Regarding claim 7, Sidey and Hansen teach all the limitations as applied to claim 1. Sidey further teach means wherein:

      a. The management server includes means for distributing routing means for routing settings from setup information for the firewall (column 4, lines 12-15). Note that router information can be included in the setup information.

      b. Distributed routing means (to firewalls or other network devices) include means for setting up the setup information in the network device (column 9, lines 20-40).

Although the system disclosed by Sidey and Hansen (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose:

a. A firewall is disposed between the management server and a network device.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Sidey and Hansen, as evidenced by Antur et al..

In an analogous art, Antur et al. disclose a system for firewall configuration (setup)

wherein:

a. A firewall is disposed between the management server and a network device

   (figure 2). Note that the act of configuring the firewall fulfills this

   requirement. The reference also teaches configuration of other security

   devices inside and outside the firewall.

Given the teaching of Antur et al., a person having ordinary skill in the art would have

readily recognized the desirability and advantages of modifying Sidey and Hansen by including

routing information for further setup of network devices on the other side of the configured

firewall. This allows for a management server at a remote location (possibly a third party) to

operate outside the firewall and provide configuration without physical access.

21.   Regarding claim 13, although the system disclosed by Sidey and Hansen (as applied to

claim 10) shows substantial features of the claimed invention, it fails to disclose means wherein:

a. The network device is a firewall

b. Each of the plurality of pieces of setup information includes setup information

   related to access control for the firewall.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Sidey and Hansen, as evidenced by Antur et al..

In an analogous art, Antur et al. disclose a system for configuration (setup) wherein:

  a. The network device is a firewall (figure 2; column 6, lines 50-55).

  b. Each of the plurality of pieces of setup information includes setup information related to access control for the firewall (column 6, lines 50-55).

Given the teaching of Antur et al., a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sidey and Hansen by employing the use of setup information for firewalls. Firewalls require a large amount of setup information and must be commonly administered by a small number of personnel.

22. Regarding claim 16, Sidey and Hansen teach all the limitations as applied to claim 10. Sidey further teach means wherein:

  a. The management server includes means for distributing routing means for routing settings from setup information for the firewall (column 4, lines 12-15). Note that router information can be included in the setup information.

  b. Distributed routing means (to firewalls or other network devices) include means for setting up the setup information in the network device (column 9, lines 20-40).

Although the system disclosed by Sidey and Hansen (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose:

  a. A firewall is disposed between the management server and a network device.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sidey and Hansen, as evidenced by Antur et al..

In an analogous art, Antur et al. disclose a system for firewall configuration (setup) wherein:

      a. A firewall is disposed between the management server and a network device

(figure 2). Note that the act of configuring the firewall fulfills this

requirement. The reference also teaches configuration of other security

devices inside and outside the firewall.

Given the teaching of Antur et al., a person having ordinary skill in the art would have

readily recognized the desirability and advantages of modifying Sidey and Hansen by including

routing information for further setup of network devices on the other side of the configured

firewall. This benefits the system by allowing a management server at a remote location

(possibly a third party) to operate outside the firewall and provide configuration without physical

access.

23.   Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidey

and Hansen as applied to claims 1 and 10, respectively, and further in view of Reid et al.

24.   Regarding claim 8, Sidey and Hansen, teach all the limitations as applied to claim 1.

Although the system disclosed by Sidey and Hansen (as applied to claim 1) shows

substantial features of the claimed invention, it fails to disclose means wherein the management

server and the routing means include means for performing mutual authentication and means for

encrypting data.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Sidey and Hansen as evidenced by Reid et al..

In an analogous art, Reid et al. discloses a system for firewall configuration including

means wherein a the management server and the routing means include means for performing

mutual authentication and means for encrypting data (column 3, lines 1-7; column 5, lines 51-

57). Note that the purpose of the firewall includes authentication and encryption between clients

and servers on opposite sides of the firewall.

Given the teaching of Reid et al., a person having ordinary skill in the art would have

readily recognized the desirability and advantages of modifying Sidey and Hansen by employing

the inclusion of authentication and encryption instructions in the setup information to the

firewall. These are common functions of a firewall and must be included in any setup

information. Including them in the automatic setup benefits the system by allowing for

guaranteed consistency of this security policy.

25.   Regarding claim 17, although the system disclosed by Sidey and Hansen (as applied to

claim 10) shows substantial features of the claimed invention, it fails to disclose means wherein

the management server and the routing means include means for performing mutual

authentication and means for encrypting data.

Nonetheless, these features are well known in the art and would have been an obvious

modification of the system disclosed by Sidey and Hansen as evidenced by Reid et al..

In an analogous art, Reid et al. discloses a system for firewall configuration including

means wherein a the management server and the routing means include means for performing

mutual authentication and means for encrypting data (column 3, lines 1-7; column 5, lines 51-

57). Note that the purpose of the firewall includes authentication and encryption between clients

and servers on opposite sides of the firewall.

Given the teaching of Reid et al., a person having ordinary skill in the art would have

readily recognized the desirability and advantages of modifying Sidey and Hansen by employing

the inclusion of authentication and encryption instructions in the setup information to the

firewall. These are common functions of a firewall and must be included in any setup

information. Including them in the automatic setup benefits the system by allowing for

guaranteed consistency of this security policy.
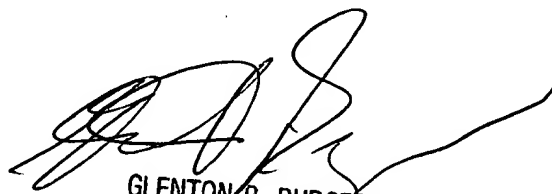
Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The

examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone numbers for the

organization where this application or proceeding is assigned are (703)746-9242 for regular

communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)305-3900.

<div style="text-align: right">

Kevin Parton
Examiner
Art Unit 2153

</div>

ksp
December 11, 2002

GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100